# USACE Overview

**LTG Thomas Bostick**
**Commander**
**Headquarters, USACE**

# Briefing Agenda

- US Army Corps of Engineers (USACE)
  - USACE's Value to the Nation
  - USACE Chief of Engineers - Multiple Roles
  - USACE Mission and Focus Areas
  - USACE  Campaign Goals and Objectives
  - Who we Are, What we do, Where we do it
  - USACE Organization Structure Programs,
  - USACE Program and Employment Work Force, and Trends
  - Program Areas
    - Military Programs
    - Civil Works Programs
    - Army Geospatial Center
    - Engineer Research and Development Center

# USACE Vision

**Engineering solutions for our Nation's toughest challenges.**

# USACE Mission

**Deliver vital public and military engineering services; partnering in peace and war to strengthen our Nation's security, energize the economy and reduce risks from disasters.**

# USACE's Value to the Nation

## USACE provides value for the Nation in many ways to diverse stakeholders.

- **We deliver positive impacts for today and tomorrow - in construction, natural resource management, energy and sustainability and capacity building, and more.**
- **We have the "right" people: world-class professionals, civilians, and soldiers alike.**
- **We are U.S. Army *"ambassadors"* on a daily basis to political leaders, America's small businesses, and to citizens wherever we serve them.**

# Employee Value Proposition

US Army Corps of Engineers®

**The US Army Corps of Engineers is BUILDING STRONG® by providing innovative engineering solutions to the Nation, challenging and rewarding careers, and professional growth opportunities in a family-friendly environment.**

## YOU MATTER:

- ***We offer challenging and diverse missions*** **allowing you to serve the Nation and the world. You do great things every day that make a difference in people's lives.**
  - Provide national security and emergency response
  - Support the Armed Forces
  - Develop technology and systems that save the lives of Soldiers and civilians
  - Provide flood risk management and navigable waterways
  - Protect the environment
  - Manage and create recreational opportunities

## WE PROMISE:

- ***A team-inspiring and collaborative work environment*** **providing challenging and rewarding careers for many specialties.**
  - Gain extraordinary experiences
  - Create a foundation for success
  - Develop professionally and personally
  - Explore new horizons
  - Build lasting relationships
  - Enjoy a balance between professional and personal life

# USACE Campaign Plan Goals

- ***Support the Warfighter***

- ***Transform Civil Works***

- ***Reduce Disaster Risks***

- ***Prepare for Tomorrow***

# Multiple Roles

**Chief of Engineers**
**ARSTAF**

**Commander**
**USACE**

**Chief of Branch**
**Engineer**

**ARSTAF Staff Principal**

**Direct Reporting Unit Commander (GO#3 & AR 10-87)**

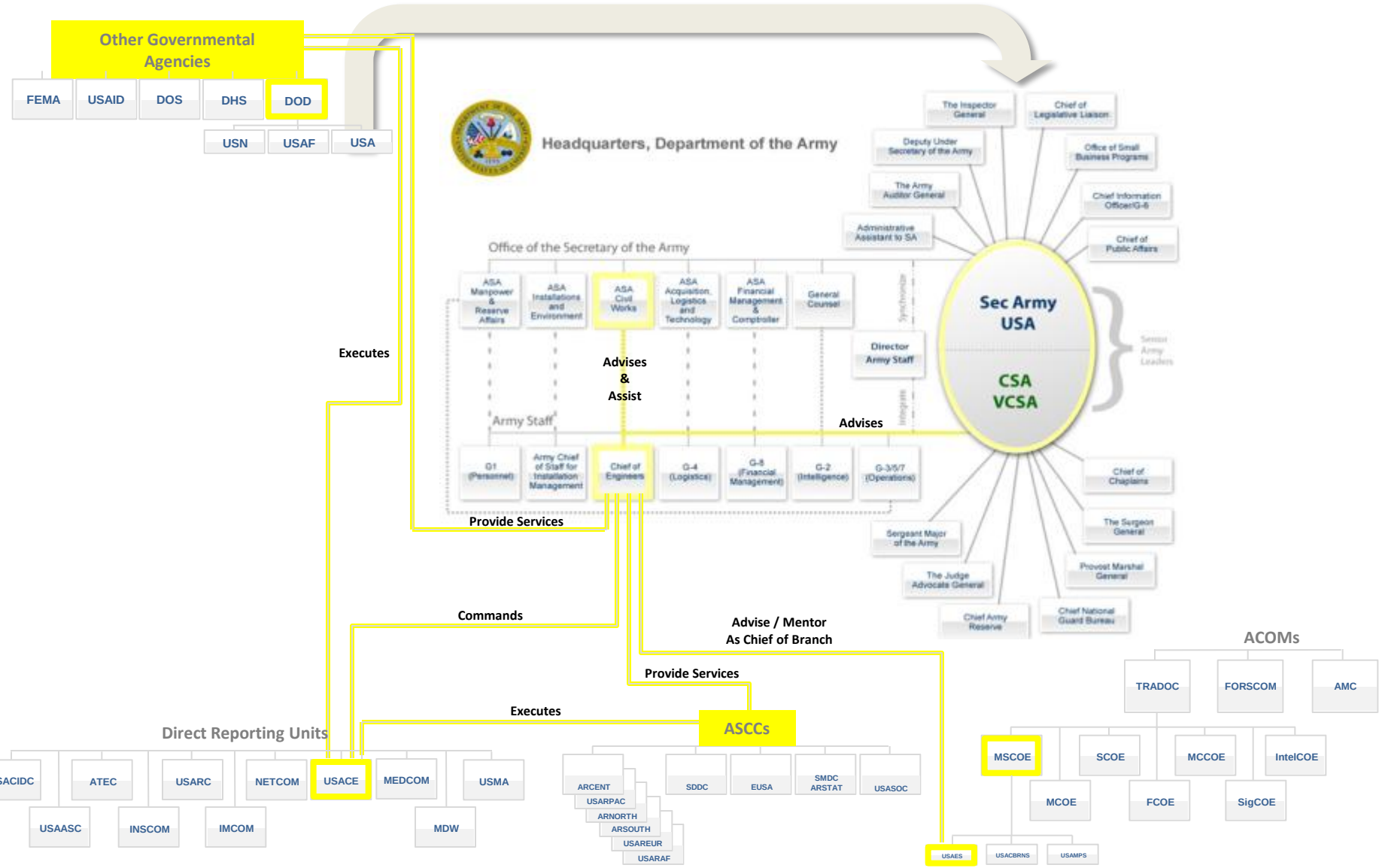
**Capability Area Manager Operational Engineering (DODD 7045.23)**

**Regimental Advisor - Senior Mentor**

**Geospatial Governance Board Co-Chair (GGB Charter s/VSCA 1 May 2011**

**Joint Operations Engineer Board Co-Chair (JROCM 05 / DODD 7045.23**

# Multiple Roles



# USACE Mission Areas

***BUILDING STRONG – USACE Supports the Army and the Nation***

## Military Programs

- Military Construction
- COCOM Support ,Overseas Contingency Operations (OCO)
- Installation Support, Environmental, Energy and Sustainability

## Real Estate

- Acquire, Manage and Dispose
- DoD Recruiting Facilities
- Contingency Operations

## Civil Works

- Navigation, Hydropower
- Flood Control, Shore Protection
- Water Supply, Regulatory
- Recreation, Disaster Response
- Environmental Restoration

## Research & Development

- Warfighter
- Installations & Energy
- Environment
- Water Resources

## Homeland Security

- Critical Infrastructure
- Anti Terrorism Plans
- Intelligence
- Facility Security Partnership

## Interagency Support

- Federal
- State
- Local
- International

## Geospatial Support

- Support to Civil Works Programs
- Support to Military Programs
- Common Operating Picture/Environment
- Support to Emergency & Contingency Ops

**USACE Has a Diverse Mission Set Driven by Diverse Customers**

# USACE Authorities - (Not an All Inclusive List)

**Military Programs/Real Estate/Interagency Support/Environmental**

- Title 10, 15, 22, 30, 31, 33 and 40 of United States Code Authority
- FY04 Section 2808, National Defense Authorization Act (NDAA) (as amended and extended in subsequent NDAA**): Contingency Construction Authority**
- **Afghanistan Security Forces Fund**- annual and supplemental appropriations acts, e.g. Consolidated Appropriations Act, 2008, Division L
- **Iraq Security Forces Fund-** annual and supplemental appropriations acts, e.g. Consolidated Appropriations Act, 2008, Division L
- Comprehensive Environmental Response, Compensation, and Liability Act **(CERCLA)** and amendments
- Oil Pollution Act
- 1942 Presidential Directives **Power Procurement Officer**
- **DA General Order 3**
- **AR 10-87 DA Manager of Commercial Utilities Program (CUP)**
- AR 420-1: Army Facilities Management
- AR 50-7 Army Reactor Program
- AR 200-1 Environmental Protection and Enhancement
- AR 405 – Real Estate
- AR 420-41, Facilities Engineering – Acquisition and Sales of Utilities Services, 15 Sep 1990**, provides responsibilities, policy, and guidance on the acquisition and sale of utilities services.**
- DFARS 241, Acquisition of Utility Services, identifies Chief Engineers as the Service Power Procurement Officer for the Army.
- AFARS 5141 (Revision #25): Chief of Engineers is the DA Power Procurement Officer
- DoDDI Construction Agent
- DoD Executive Agent for Real Estate
- DA Authority for Military Construction
- DoD Manager for the Homeowners Assistance Program

**Civil Works**

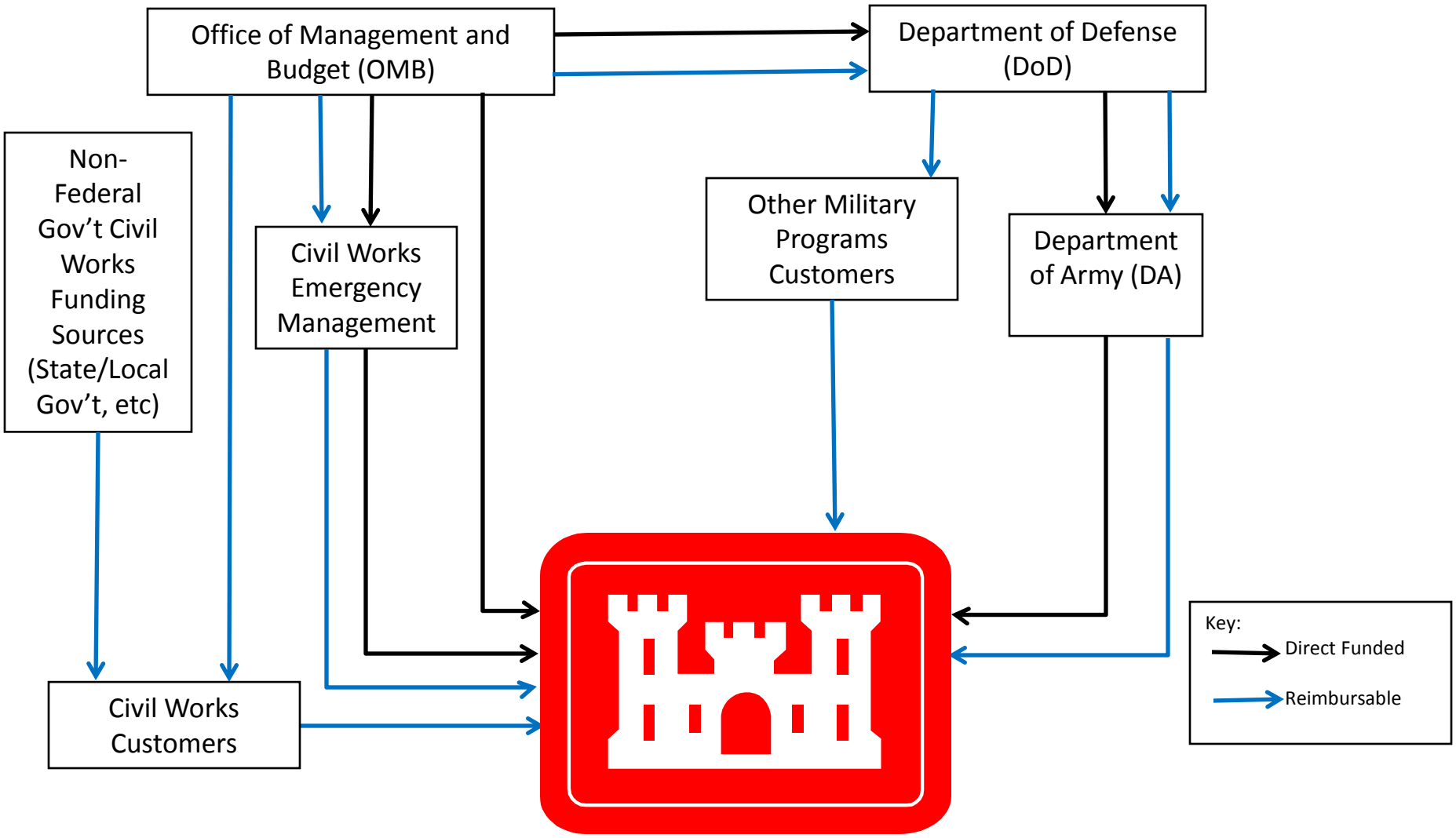
- **1824:** Rivers & Harbors Act authorized Corps work in clearing obstacles on Ohio, Mississippi Rivers and at ports. Subsequent R&H Acts authorize USACE improvement of other US navigable waters
- **1899:** Sec. 10, Rivers & Harbors Act gives Corps regulatory authority over construction in navigable waterways
- **1928:** Mississippi River & Tributaries Flood Control project
- **1936:** Flood Control Act (and subsequent F.C. Acts) - nationwide Corps flood protection mission
- **1938:** Flood Control Act authorizes construction of hydropower plants
- **1944:** Flood Control Act authorizes recreation areas at projects; large reservoirs on Missouri River
- **1955:** P.L. 84-99, ( Flood Control & Coastal Emergency Act of 1955 ) Corps mission in flood fighting, repair of damaged flood control works, etc.
- **1946:** Shore Protection Cost Sharing Act
- **1970:** National Environmental Policy Act requires environmental analysis of all proposed Corps activities
- **1970:** Office of Assistant SecArmy (Civil Works) established in law; first filled in 1975
- **1972**: Clean Water Act gives USACE regulatory authority over dredging and fill operations in all "waters of the U.S." including many wetlands
- **1986:** Water Resources Development Act requires cost sharing for most projects; Sec. 1135 authorizes existing projects to be modified for environmental improvement
- **1990:** Water Resources Development Act establishes environmental preservation/restoration as project purpose on par with navigation and flood risk management
- **2007:** Water Resources Development Act calls for equal consideration of economic, environmental and social benefits in planning Civil Works projects

**All Hazard Contingency Operations**

- Stafford Act PL 93-288 ( National Response Framework )
- Overseas Contingency Operations
- Field Force Engineering Support to Combatant Commands (COCOM)

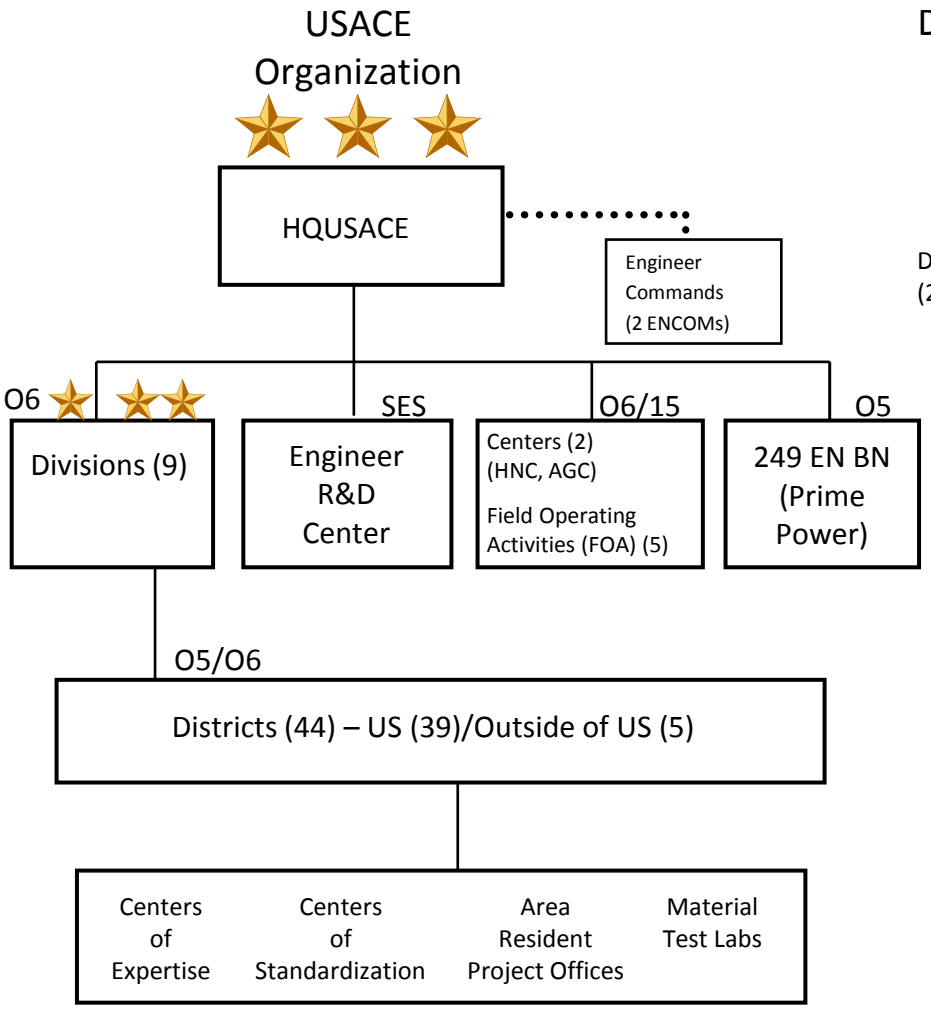
**USACE Has Numerous Authorities Based in Statute, Regulation and Policy**

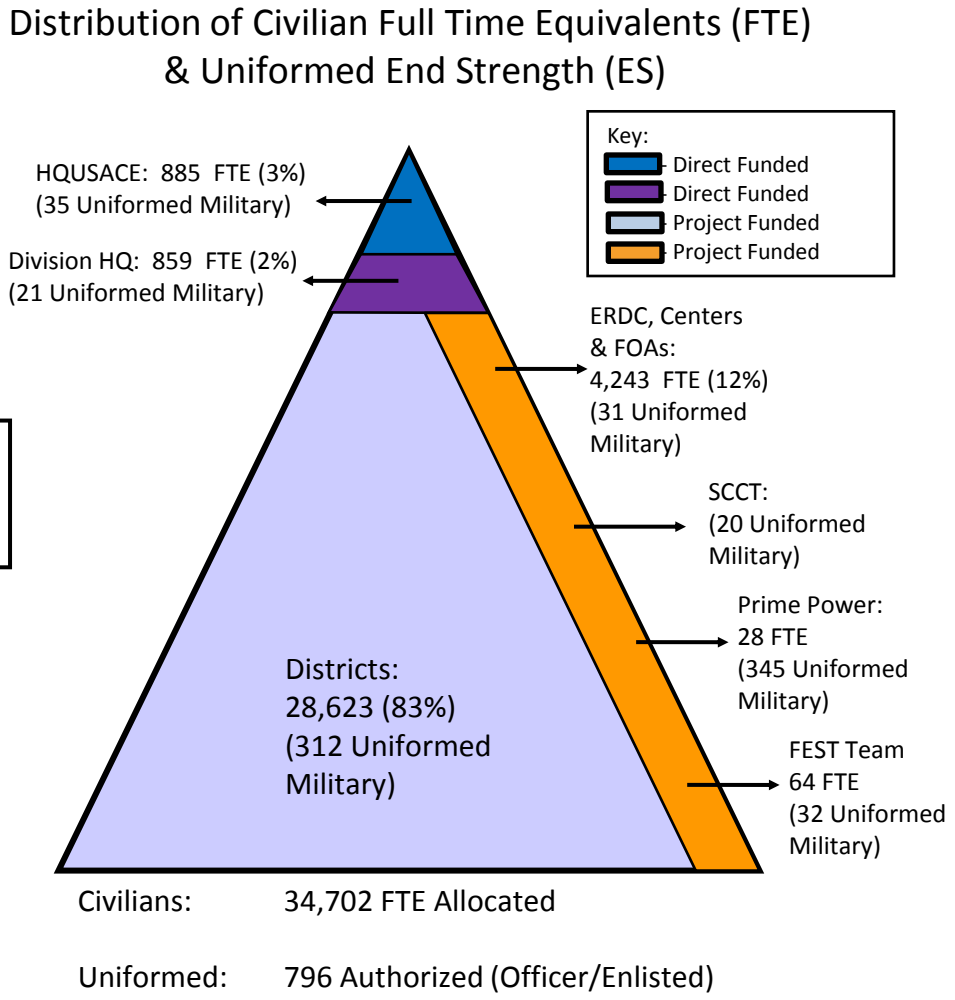
# USACE Funding Flow




**USACE Funding Comes from Multiple Sources**

# USACE Organization and Manpower

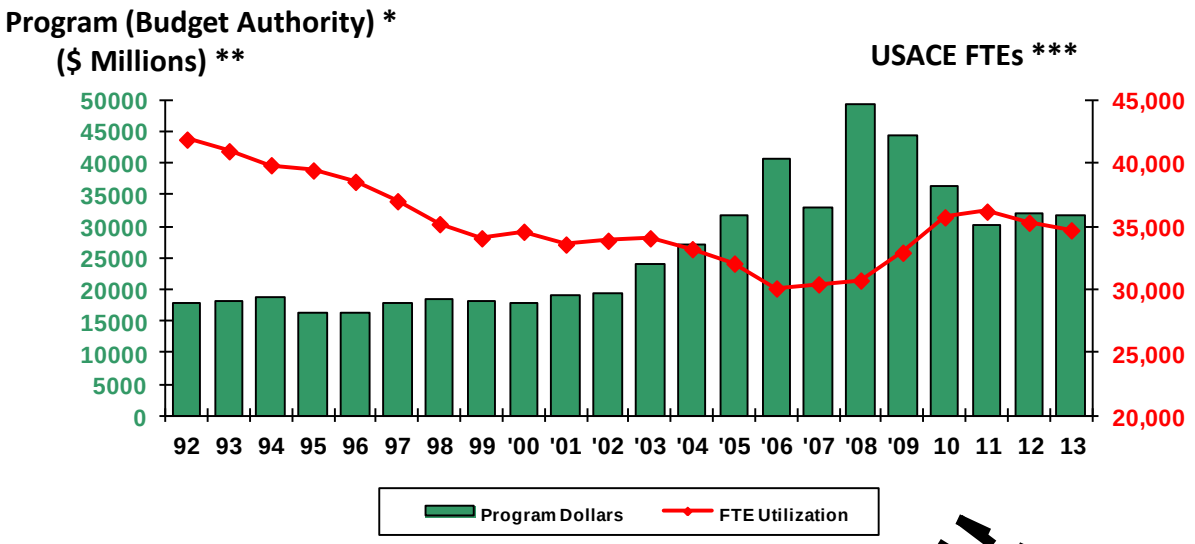



**Workforce Size Driven by Customer Programs – 95% FTE Project Funded**

Data as of Oct 12 FOAs=HECSA,IWR,MDC,UFC,ULA ▪▪▪▪▪ OPCON to USACE when not deployed Full-Time Equivalent (FTE) Senior Contingency Contracting Teams (SCCT)

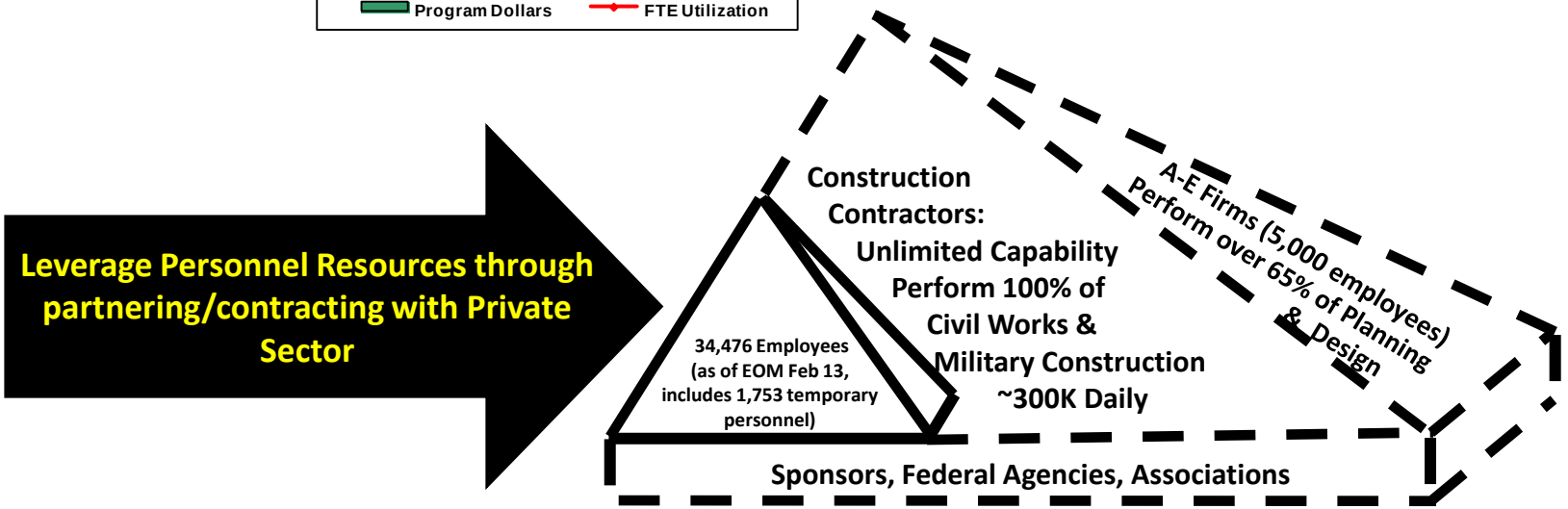
# Program & Employment Trends FY92-13




- Includes Military, Civil, and International and Interagency Support

** FY13 Constant Dollars

*** FTE Utilization




**USACE Maintains a Balance Between In-sourced and Outsourced Work**

Data as of Mar 13

# Military Programs Missions



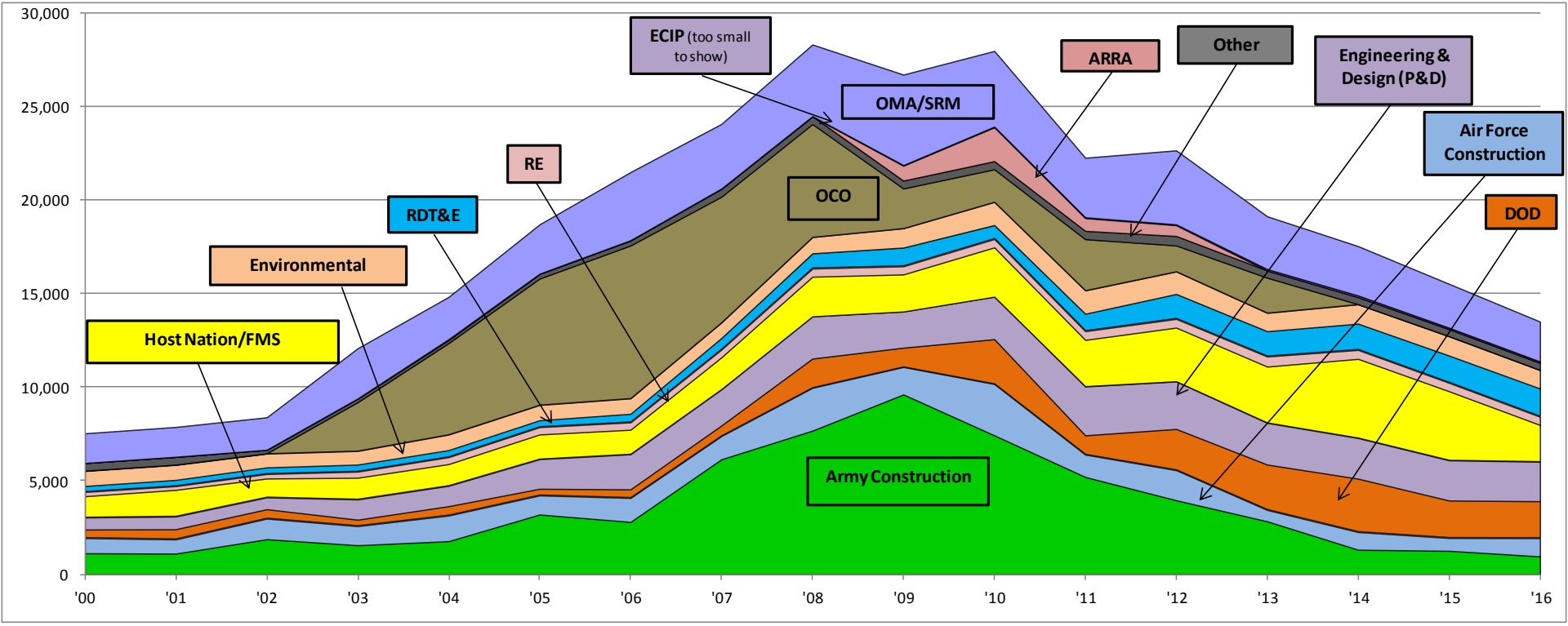

- Military Construction
- Real Estate
- Overseas Contingency Operations (OCO)
- Installation Support
- Environmental of Formerly Used Defense Sites
- Interagency Support
- International Services

BUILDING STRONG®



# Military Missions Program Trends
## FY00-16

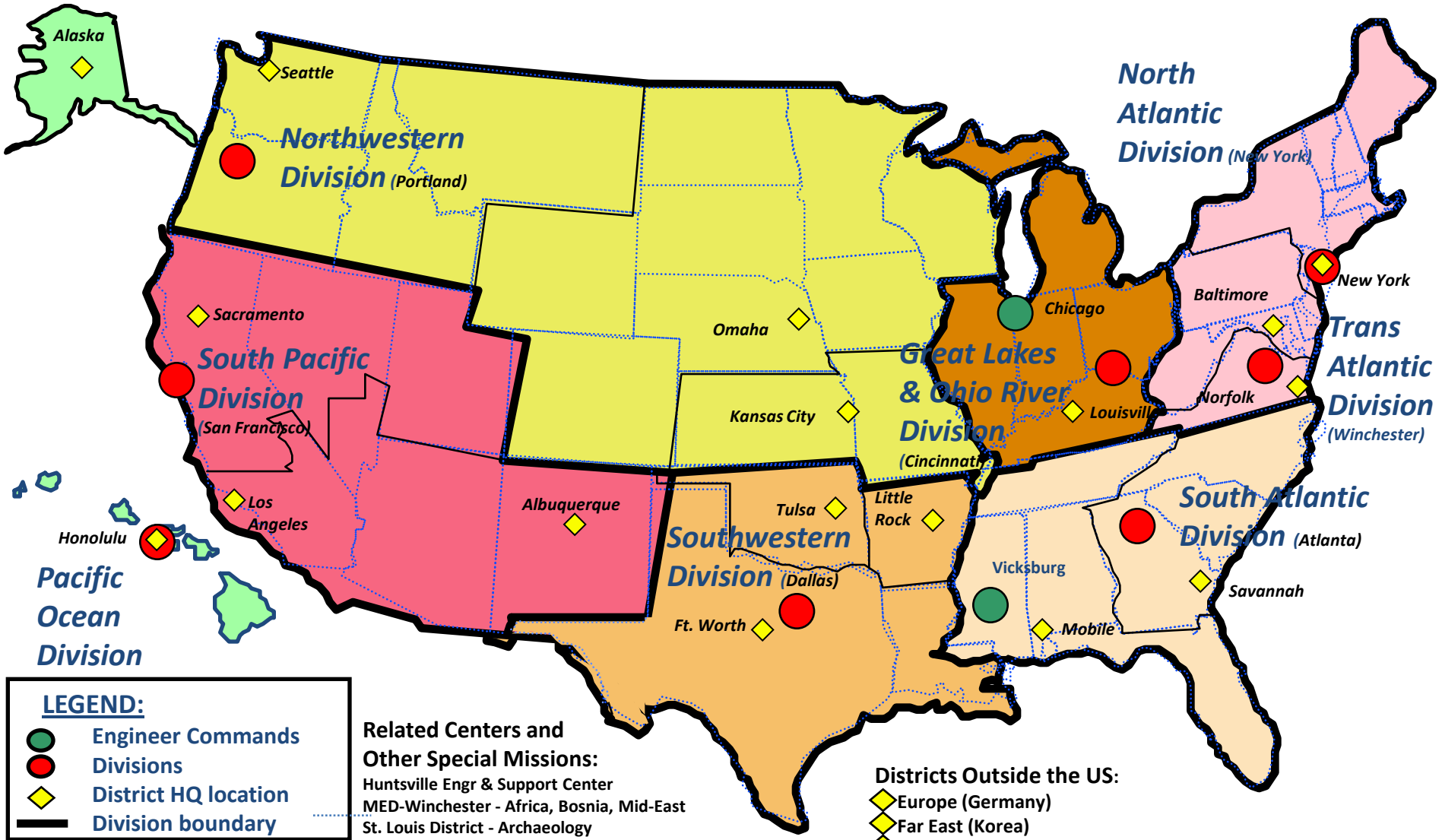
**Program ($Millions)**




| |
|---|
| FY12 consists of actual executed program |
| FY13 consists of current program on books plus FY12 carryover |
| FY14 - 16 consist of PRESBUD as of 26 Oct 12 |
| OCO (FY12 and FY13) only includes OMA OCO for the Overseas Mission and Reconstruction-Reimbursable for Afghanistan Security Forces |
| Other includes OPA, Non-Ded Reimbursable, Division Support for MILCON (DOS) - direct and Other Dir (MCA SPT/DS-SD/ETC). |
| Note: The FY09 -12 OMA/SRM data was adjusted to correct a discovered duplication error. |

Data as of 22 Jan 13

# USACE Military Programs Boundaries




**LEGEND:**

- Engineer Commands
- Divisions
- District HQ location
- Division boundary

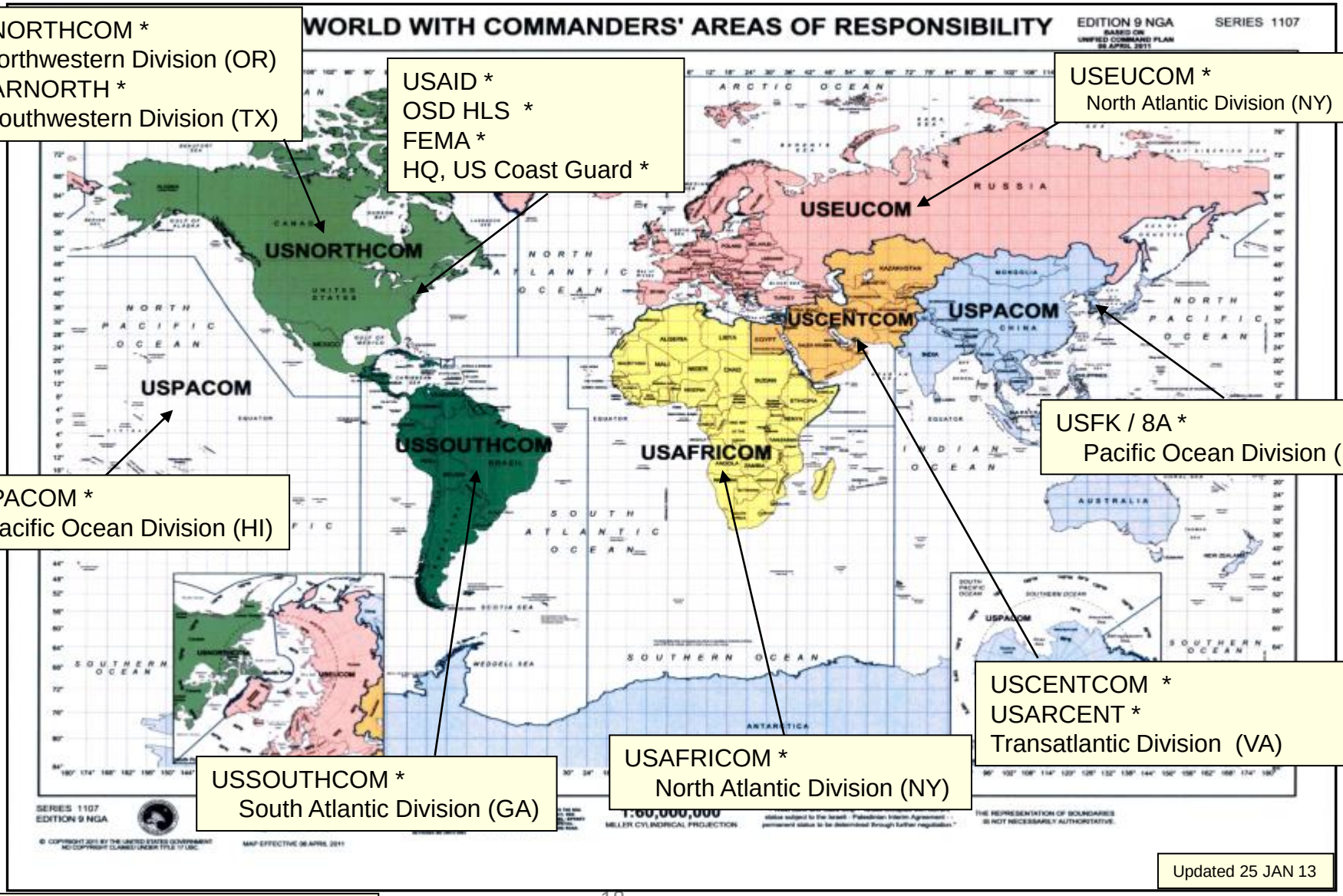
**Related Centers and Other Special Missions:**

Huntsville Engr & Support Center
MED-Winchester - Africa, Bosnia, Mid-East
St. Louis District - Archaeology
Philadelphia District - Brokered MILCON
Mobile District - Panama, Puerto Rico, etc
Transatlantic Division – USACE Deployment Center

**Districts Outside the US:**

- Europe (Germany)
- Far East (Korea)
- Japan
- 3 Districts in TAD

# USACE Alignment with the Geographic CCMDs, and other Federal Agencies




USNORTHCOM *
Northwestern Division (OR)
USARNORTH *
Southwestern Division (TX)

USAID *
OSD HLS *
FEMA *
HQ, US Coast Guard *

USEUCOM *
North Atlantic Division (NY)

USFK / 8A *
Pacific Ocean Division (HI)

USPACOM *
Pacific Ocean Division (HI)

USCENTCOM *
USARCENT *
Transatlantic Division (VA)

USSOUTHCOM *
South Atlantic Division (GA)

USAFRICOM *
North Atlantic Division (NY)

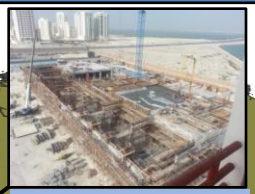
Updated 25 JAN 13

* USACE provides embedded LNO

# FY 12/13 USACE Global Engagement

Engagement - 132+ Countries

Physical Presence - 43 Countries



Port in Bahrain development for U.S. and allied ships .

Jordan: Contract for underground bunkers in three separate locations.

Colombia Renovate Hangar, Support Building, Parking Lot, Helicopter Warehouse

Qatar: New construction consolidates several U.S. Air Force functions.

Technical Assistance Visit Sao Francisco River, Brazil

Zambia Water Supply Feasibility Studies

Potable Water Project, Mozambique

As of 23 Jan 13

# Civil Works Programs

# The Civil Works Mission

**Development & Management of Water Resources Infrastructure**

**Protection, Restoration & Management of Environmental Resources**

**Engineering & Technical Services**

**Disaster Response & Recovery**

# Civil Works Program

## *Preserving the Strength of the Nation*


Lock and Dam 15 ( Mississippi River )


Flood Wall ( Williamson, KY )


Florida Everglades

***Deliver enduring, comprehensive, sustainable, and integrated solutions to the Nation's water resources and related challenges through collaboration with our stakeholders***

( Regions, States, localities, Tribes, other Federal agencies )

**($1.883 B) Navigation (38%)**

**($1.425 B) Flood Risk (28%) Management**

**($621 M) Ecosystem (12%) Restoration & Infrastructure**

**($193 M) Hydropower (4%)**

**($243 M) Recreation & Natural (5%) Resource Management**

**($193 M) Regulatory Program: (4%) Wetlands & Waterways**

**($6 M) Water Supply (<1%)**

**($185 M) Expenses (4%)**
(Includes ASA(CW))

(FY 2012 Workplan)


Dredge ESSAYONS ( Coos Bay, OR )


Lake Seminole ( Mobile District )


Bonneville II Powerhouse ( Washington )

# Civil Works Value to the Nation










- Nearly $8 in flood damages prevented for every $1 spent on Flood Risk Management

- Stewardship of 11.7 million acres of public lands

- 14,500 miles of Levees and 400 miles of shoreline protection

- 702 Dams and 926 Harbors

- 13,000 miles of Commercial Inland Waterways

- Environmental Restoration and Emergency Responses

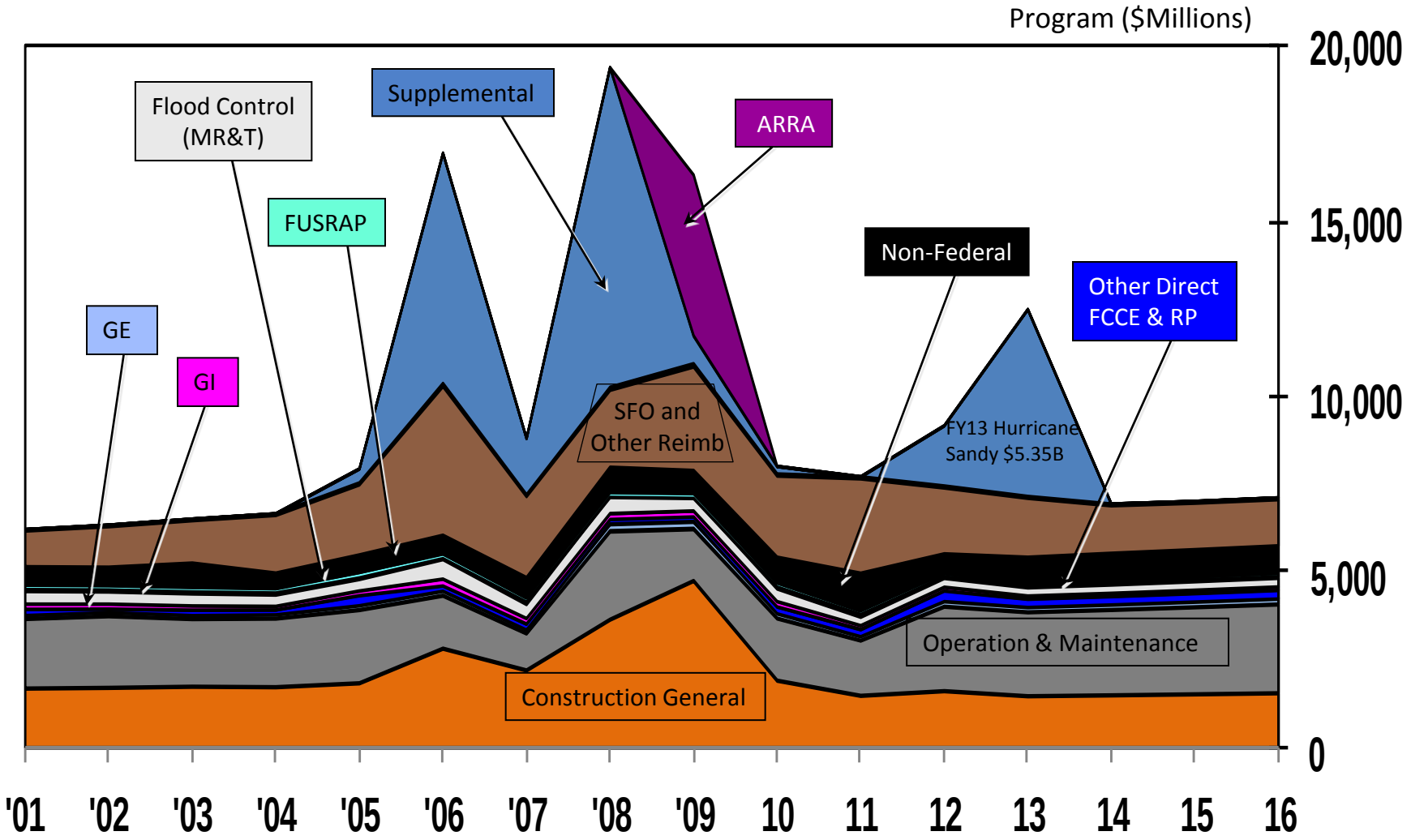
- Recreation program generating $16 B + 270 K jobs

- 3% of Nation's Electricity: $1.5 B plus in sales

- Waterways moving goods at 50% cost of Rail and 10% cost of Trucks

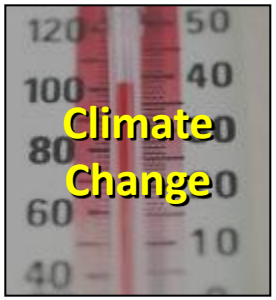
- ***U.S. Ports and Waterways convey >2B Tons of Commerce***
  ***Foreign Trade creates >$160 B in Tax Revenues***

# Civil Works Program Trends
## FY01-16

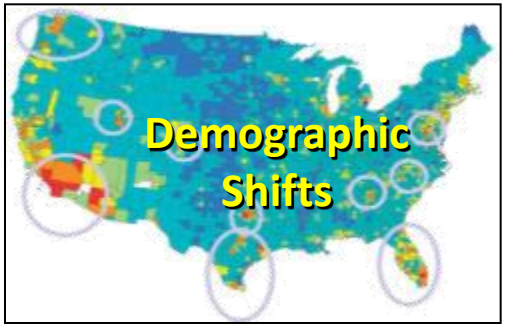


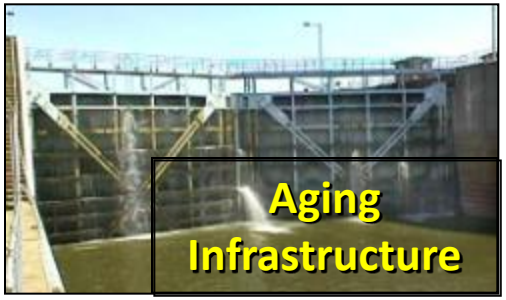

Data as of Mar 13

# National Water Resource Challenges











# Civil Works Support to National Defense

## Civil Works makes available:

- 25,000 engineers and related professionals.
- Large-scale construction capability.
- Relationship with contracting community.
- Environmental skills.
- Location in hundreds of communities.
- Interaction with millions of citizens.
- … *all at no peacetime cost to DOD.*

Corps members deployed to Iraq and Afghanistan have built roads, airstrips, ports, electric stations, hospitals, schools, and other key infrastructure to promote stability.

# Regional Water Resources Challenges

- Asian Carp (Great Lakes/Mississippi River)
- Vegetation on Levees (WA, CA, TX)
- ACT/ACF Basins (GA, AL, FL)
- Everglades Restoration
- Great Lakes - Lake Levels
- Chesapeake Bay
- Bay Delta, CA
- Columbia Fish Program (OR, WA, ID)
- Columbia River Treaty
- Missouri River
- Ohio River Basin

# U.S. Army Geospatial Center

# Army Geospatial Center

PRODUCTION ★ ANALYSIS ★ REACH-BACK ★ SYSTEMS ENGINEERING ★ RESEARCH AND DEVELOPMENT

**OUR VISION:**
*Enabling geospatial information dominance.*

**OUR MISSION:**
*Providing timely, accurate, and relevant geospatial information, capabilities, and domain expertise for Army Geospatial Enterprise implementation in support of unified land operations.*

**WHAT WE DO:**

- ✓Provide geospatial information, domain expertise, training, and reachback capabilities to Warfighters, Special Operators, Mission Partners, Civil Works Programs, and First Responders.
- ✓Engage in system development, acquisition, and geospatial technology integration.
- ✓Design and implement the *Army Geospatial Enterprise (AGE).*
- ✓Conduct geospatial engineering Research, Development, Technology and Evaluation.


*Ground Warfighter's Geospatial Knowledge Center*

# Army Geospatial Enterprise

PRODUCTION ★ ANALYSIS ★ REACH-BACK ★ SYSTEMS ENGINEERING ★ RESEARCH AND DEVELOPMENT

## *What is the AGE?*

An integrated system of technologies, standards, data, organizations and processes that delivers a Standard and Sharable Geospatial Foundation (SSGF) at all echelons.

## *What does it address?*

- **Stove pipe systems** that can produce and/or consume geospatial information
- **Multiple geospatial data formats, standards, schema/models, viewers and data management process** that prevent a Common Operating Picture (COP) and interoperability
- **Ineffective** continuity of operations during unit Relief in Place / Transfer of Authority (**RIP/TOA**)
- **Ensuring** the Army has the **required geospatial products and training** for exercises, pre-deployment, and system development


*Connecting Army systems and users to the NSG/ASG Architecture*

# Partners and Customers

PRODUCTION ★ ANALYSIS ★ REACH-BACK ★ SYSTEMS ENGINEERING ★ RESEARCH AND DEVELOPMENT


**Not an exhaustive listing*

# Engineer Research & Development Center

# Engineer Research & Development Center

- 2500 Employees (1800 Full Time Federal)
- 991 Scientists & Engineers
- $1.2 Billion in Unique Research Facilities & Equipment
- $1.5 Billion Annual Program
- 77 Active Patents

Cold Regions Research and Engineering Laboratory

Hanover, NH

Construction Engineering Research Laboratory

Champaign, IL

ERDC
Geospatial Research & Engineering Division
(co-located w/ the AGC)

Alexandria, VA

ERDC Headquarters
Coastal and Hydraulics Laboratory
Environmental Laboratory
Geotechnical and Structures Laboratory
Information Technology Laboratory

Vicksburg, MS

# Engineer Research & Development Center

***Support to the Army and the Nation, Leveraging Technical Engineer Capabilities with R&D***

**Enable Theater Access**

Rapid Airfield Construction

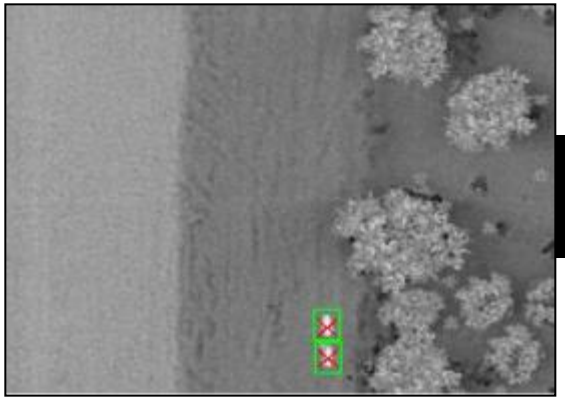
**Force Protection**

Structural **Retrofit**

Chemical and Biological

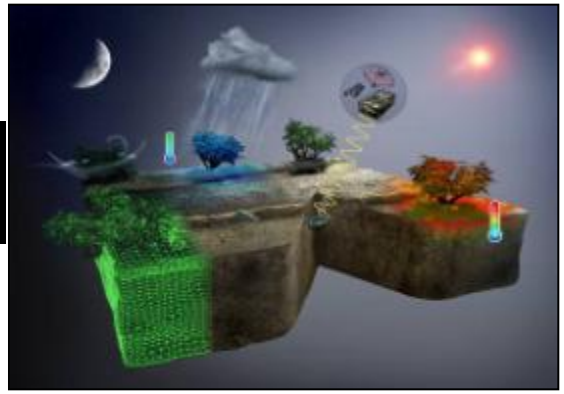
Immune Buildings

Counter Rocket, Artillery & Mortar



IED Simulation and Detection

**Countermine Phenomenology**



Countermine Phenomenology Test bed

# U.S. Corps of Engineers - Facts

- **USACE is structured to deliver across the globe.**
- **USACE has world-class civilians and Soldiers.**
- **USACE rapidly responds to disasters and challenges of all kinds.**
- **USACE delivers professional results in construction, natural resource management, energy, sustainability, capacity building.**

***We are U.S. Army "ambassadors" on a daily basis to political leaders, America's small businesses, and to citizens wherever we serve them.***

# Your Questions